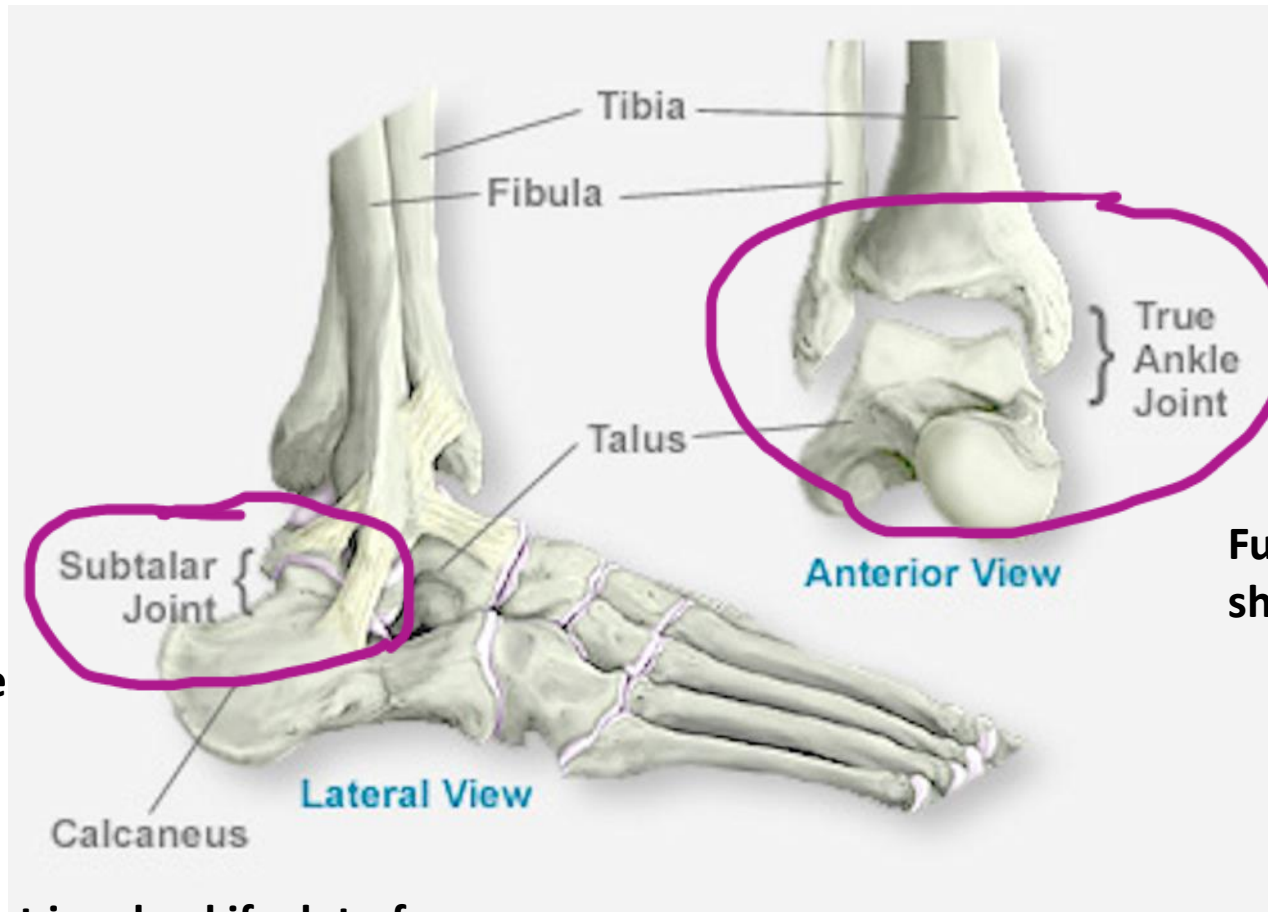




Functional Yoga Therapy™

Begin With The Feet

The Ankles: True Ankle & Sub-Talar Joint



Functions as a shock absorber

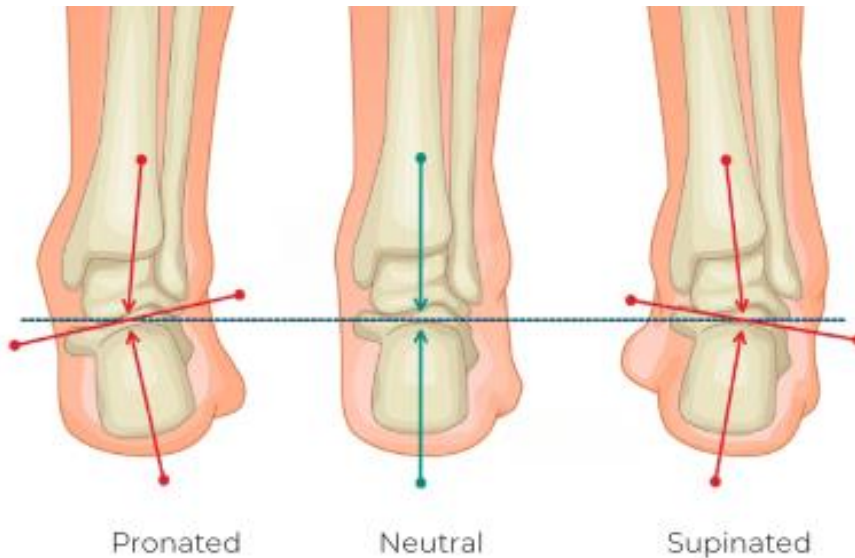
Displaces force side to side

Subtalar joint involved if a lot of displacement in one LATERAL direction.

Common Foot Imbalances & The Big Toe MTP Joint

Leads to issues up the kinetic chain

Metatarsophalangeal Joint

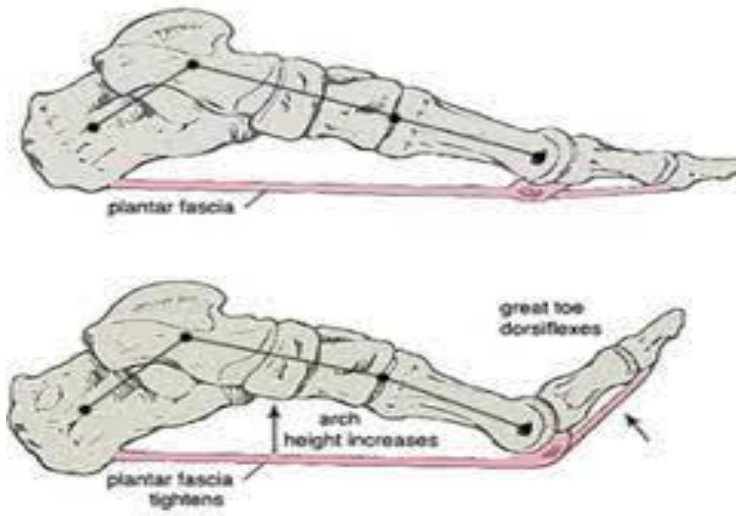


- **Overpronation:** internal rotation of structures of the lower extremities, affecting the knees, hips, and back.

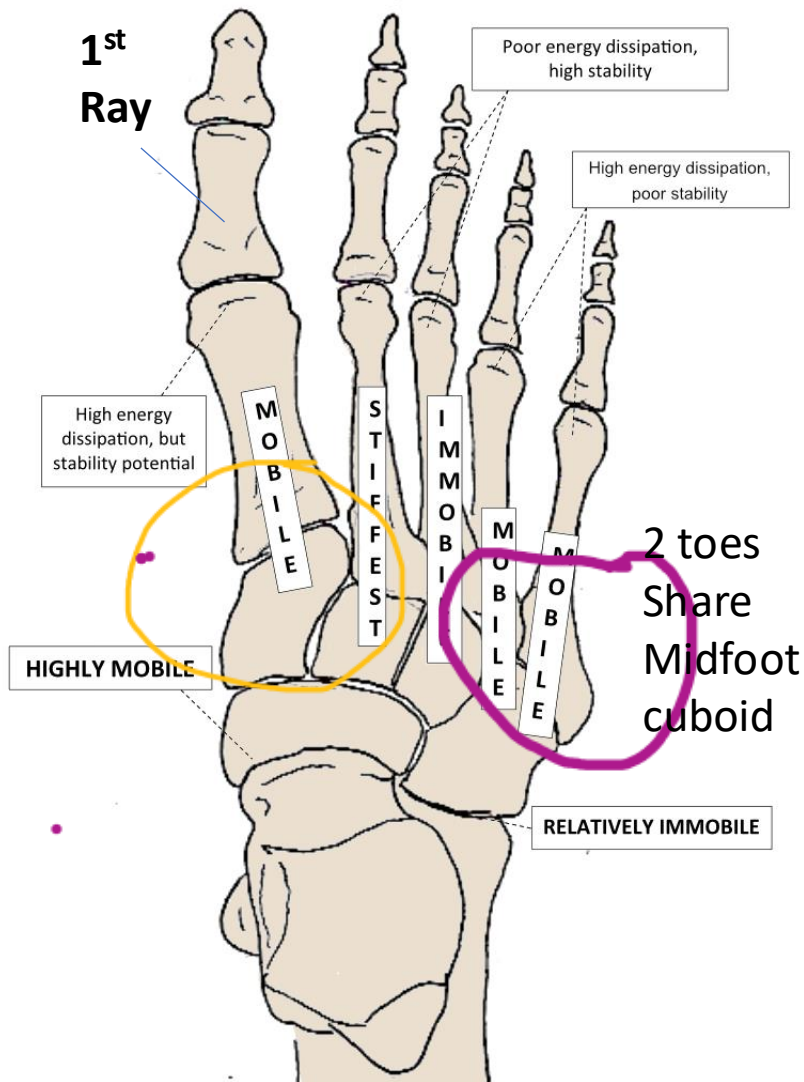
- **Oversupination:** plantar fasciitis and shin splints, ITBand issues.

- **MTP Joint:** critical component in the lower limb kinetic chain; plays a pivotal role in gait.

65 degrees MTP flexion is healthy; stabilizes foot; helps prevent falls.



Each Toe Contributes to Movement – 1st Ray Most!!!



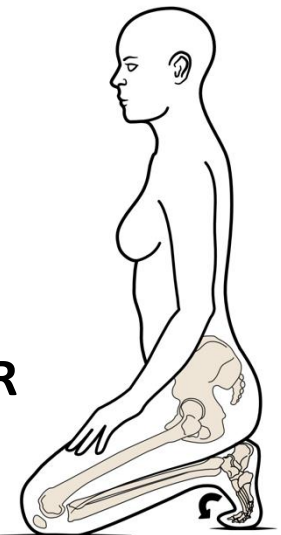
1st ray flexibility potential is key:

* gives important joint protecting flexibility to manage forces

- also creates vulnerability if stepping is dysfunctional.
 - High Heels, tight toebox
 - Ankle instability
 - Arthritis, etc.

Holding big toe, as well as Ankle at end range can Cause damage over time.

CARTILAGE WORKS BETTER IN MOTION; NOT STATIC!



Big toe joint over-extension without any motion for extended time can cause damage to joints cartilage.

How Do I Get THAT!!! Big toe ROM

<https://www.abmp.com/massage-and-bodywork-magazine/foot-mechanics-and-kinetic-chain-dynamics>



IDEAL: 65*
Very good: 35-40*
Acceptable: 30

First warm up the lower leg muscles (massage, ballwork, etc)
Do Assessment with foot on flat surface



Flexion/Extension



Sidebending



Side to side gliding



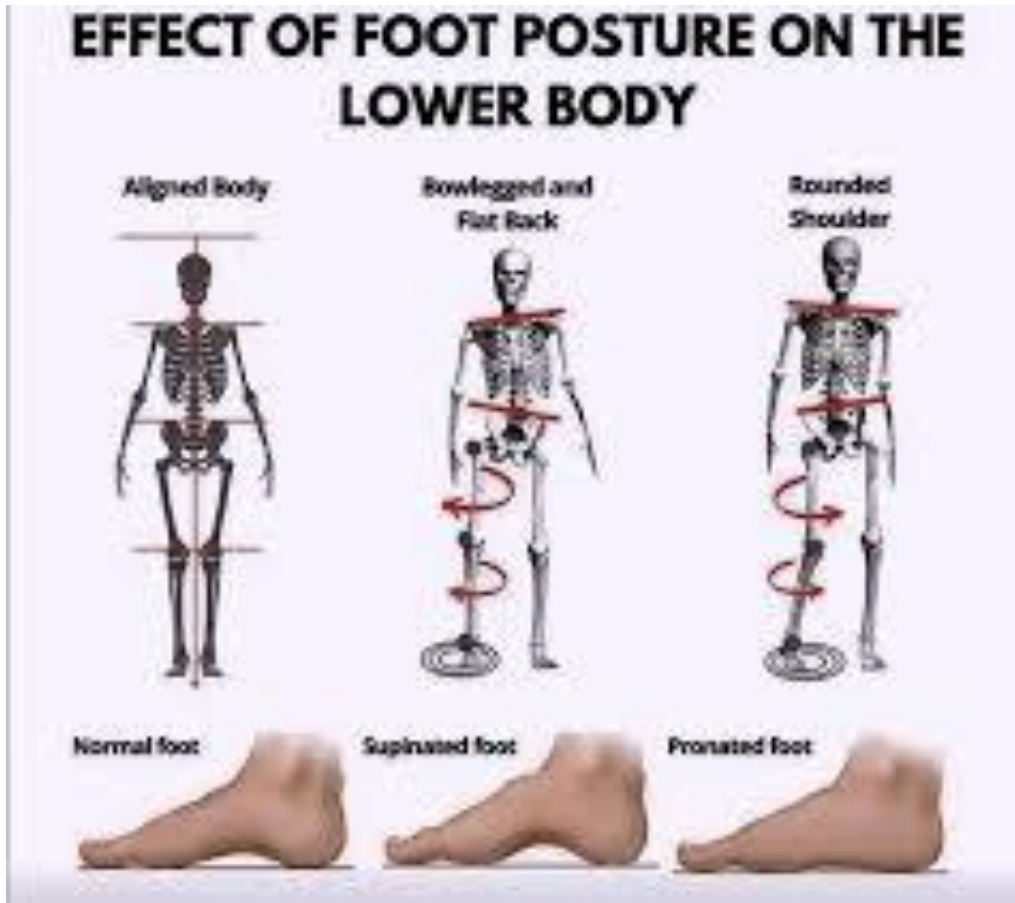
Up/Down Translation

Erik Dalton



Extend & Rotate

Up the Kinetic Chain



DON'T FORGET THE LOW BACK

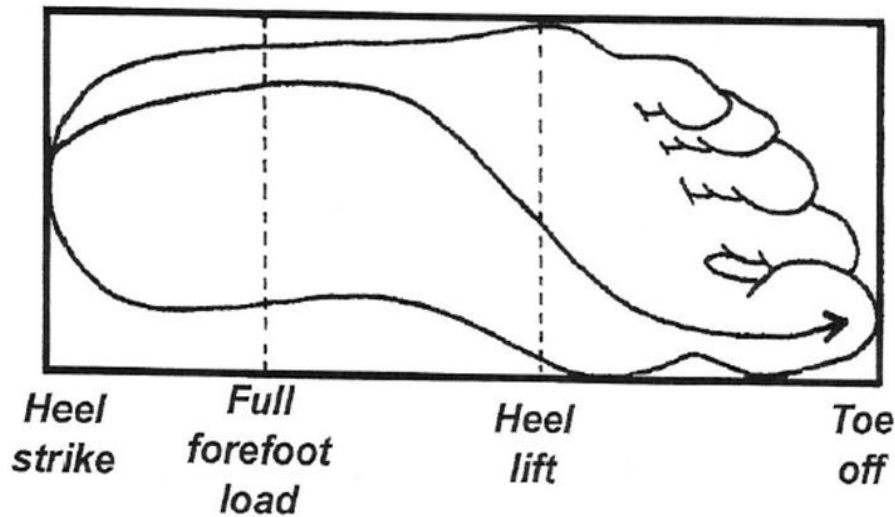
Overpronation

Knee Valgus, hip adduction/internal Rotation, anterior pelvic tilt, SHORTENS

Supination

Knee varus, hip abduction/external rotation, IT Band syndrome, LENGTHENS

How Do You Move? How Do you Balance? Supinate?



Lateral Foot Release

Most People Don't Stand the way they move.

Walking/Running/Jumping

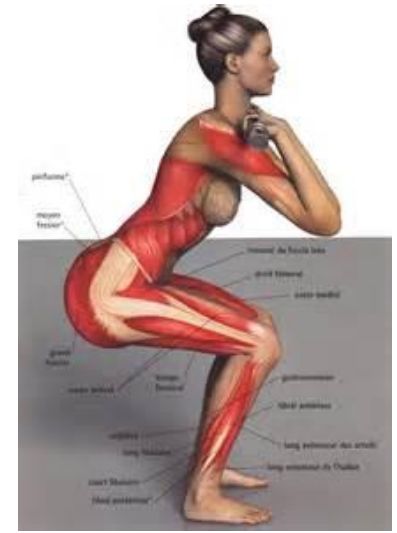
Force shifts from the outer heel through the ball of your big toe. If the foot bones cannot move well, they won't stabilize well.

If have a hard time pressing under big toe when move, 4th/5th toes
May be too stiff! Test it: Single Leg Stand

Mobo Minute Episode 17

Limited Dorsiflexion impacts the building blocks to functional movement patterns:

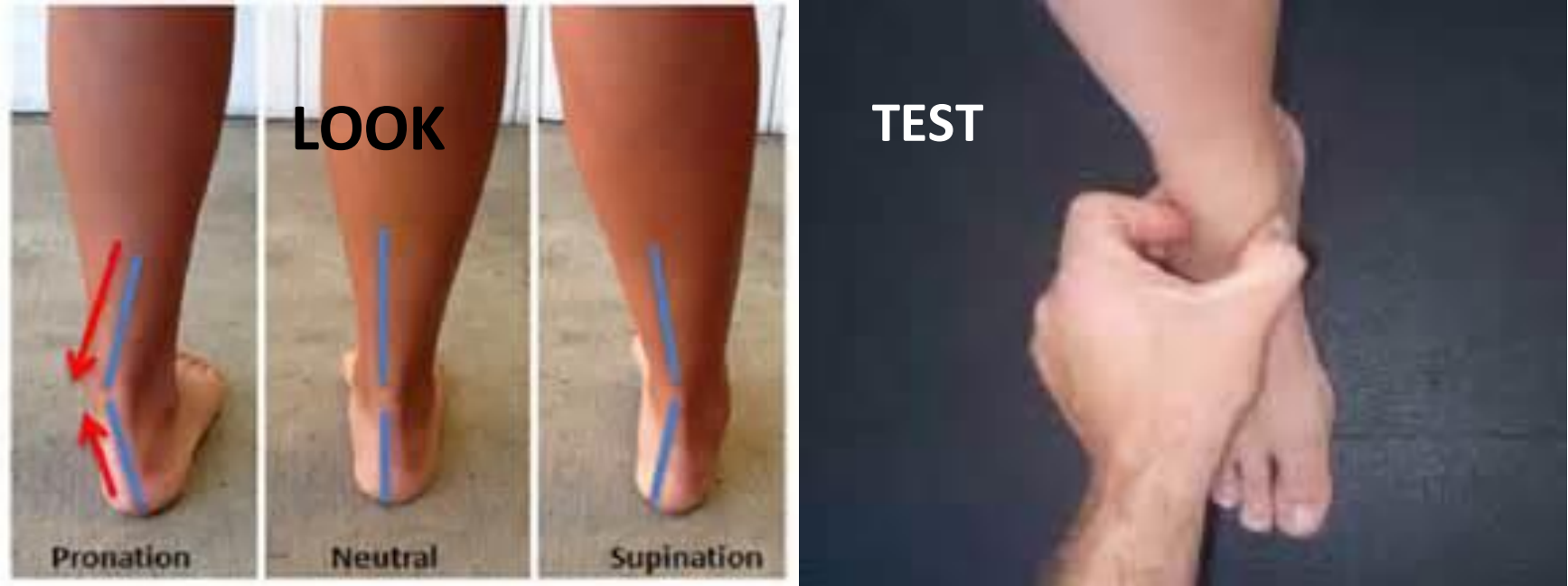
- Squat
- Single leg squat
- Step down activities
- Landing from a jump
- *FALLS, ACL INJURIES, PATELLAR TENOPATHY, JOINT DEGENERATION, ETC.*



Assessing the Feet in Posture

Overpronation is more common

- Finding true Neutral Foot and Ankle Position



1. **THUMB** to medial tarsal sinus; **INDEX FINGER** to lateral tarsal sinus.
2. **PRONATED FOOT/ANKLE:** more pressure felt on your thumb (MEDIAL SIDE)
3. **SUPINATED FOOT/ANKLE:** more pressure felt on your index finger (LATERAL SIDE)
4. **NEUTRAL:** even pressure on both thumb and index fingers.
5. **NOTE: MOST PEOPLE HAVE TO SUPINATE TO GET TO NEUTRAL.**

Assessing Ankle Mobility

(see next 2 slides for ideas reassess when done)

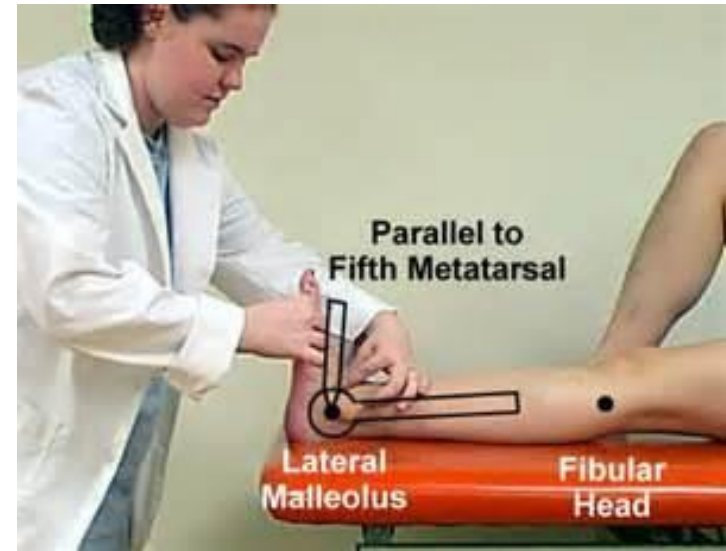
Half Kneeling Dorsi-flexion Test



Barefoot is best: foot 4-5" (10-13 cm from wall)

Each Centimeter is 3.6 degrees

Passive Goniometer Test



How much dorsiflexion do we need?

- 25 degrees at ankle (30 for deep squats)
- 30 degrees at big toe
- These are suggestions based on functional movement thought.

How Do I Get Greater Ankle Mobility?

3-STEP PROCESS: 1. Self-Myofascial release for calf/plantar fascia;
2. Stretching the calf; 3. Ankle mobility drills

- **Step 1. Self-Myofascial Release:**

- Double-balls in sock to calf
- Tennis ball to plantar foot



- **Step 2. Stretches for Calf**

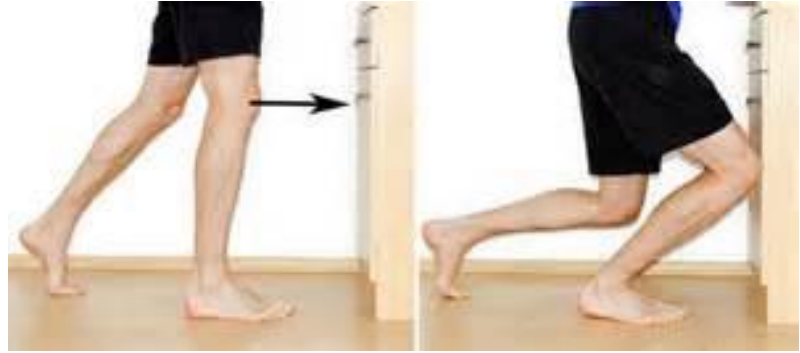
Hold for 10-30 seconds and release



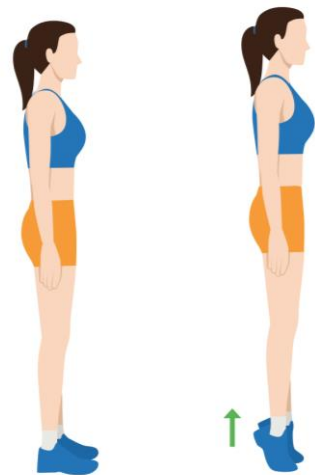
Getting Better Ankle Mobility continued

- **Step 3. Ankle Mobility Drills:**

- These are all dynamic



Don't forget to strengthen afterwards; calf strengthening increases ankle mobility



Is There a Long-Term Fix?

- Look at your shoes
 - *What you wear on your feet 90% of the time has a profound effect on your feet/ankles and whole kinetic chain.*
- A multi-faceted approach is best: Self-MFR, Stretches, Dynamic mobility drills.
- Take care of what's above and what's below
- Propping is **NOT** a long-term solution:
 - Heel lifts, immobilizing the chronic areas, buying new shoes, etc.